

**EVALUASI TEMPAT PEMROSESAN AKHIR (TPA) SAMPAH SUKOSARI
BERDASARKAN INDEKS RISIKO LINGKUNGAN DI DESA SUKOSARI,
KECAMATAN JUMANTONO, KABUPATEN KARANGANYAR, PROVINSI
JAWA TENGAH**

Oleh:

Rully Fachrurozi
114160019/TL

INTISARI

TPA Sukosari awalnya direncanakan menggunakan metode *controlled landfill* tetapi keadaan di lapangan menggunakan metode *open dumping*. TPA Sukosari dengan luas 3,8 hektar menampung sampah hingga 88,47 ton/hari. Kegiatan penimbunan sampah yang diterapkan ini menimbulkan permasalahan bagi lingkungan seperti pencemaran air dan udara. Tujuan penelitian untuk melakukan evaluasi kualitas lingkungan di TPA Sukosari dan merancang arahan pengelolaan yang tepat berdasarkan penilaian indeks risiko lingkungan.

Metode yang digunakan dalam penelitian yaitu metode survey dan pemetaan, metode pengambilan sampel, uji laboratorium dan metode analisis. Metode analisis yang dilakukan berdasarkan Peraturan Menteri Pekerjaan Umum Republik Indonesia Nomor 03 tahun 2013 tentang Penyelenggaraan Prasarana dan Prasarana Persampahan Dalam Penanganan Sampah Rumah Tangga dan Sampah Sejenis Sampah Rumah Tangga. Parameter yang diamati berupa kriteria tempat pembuangan akhir (20 parameter), kriteria sampah di TPA (4 parameter) dan karakteristik lindi (3 parameter).

Hasil penelitian menunjukkan bahwa TPA Sukosari memiliki Indeks Risiko Lingkungan sebesar 493,4987 yang termasuk dalam tingkat bahaya sedang sehingga TPA dapat diteruskan dan direhabilitasi menjadi lahan urug terkendali secara bertahap. Hal ini karena terdapat beberapa parameter dengan nilai indeks sensitivitas bahaya diantaranya yaitu Jarak terhadap sumber air terdekat, Permeabilitas tanah, Jarak terhadap air permukaan, Jenis sampah, Jarak terhadap permukiman terdekat pada arah angin dominan, Kelembaban sampah. Oleh karena itu, tindakan arahan pengelolaan yang dapat dilakukan berupa penambangan lahan urug (*landfill mining*) pada zona pasif TPA Sukosari. Sedangkan karakteristik lindi seperti BOD dan COD yang melebihi baku mutu arahan yang harus dilakukan dengan pembuatan IPL serta zona penyangga berupa pohon sengon di sekeliling TPA Sukosari.

Kata Kunci: TPA Sukosari, Indeks Risiko Lingkungan, Evaluasi Tingkat Bahaya.

***EVALUATION OF SUKOSARI WASTE LANDFILL SITES BASED (TPA)
BASED ON ENVIRONMENTAL RISK INDEX IN SUKOSARI VILLAGE,
JUMANTONO DISTRICT, KARANGANYAR REGENCY, CENTRAL JAVA
PROVINCE***

By:

**Rully Fachrurozi
114160019/TL**

ABSTRACT

TPA Sukosari was originally planned to use the controlled landfill method, but the situation in the field used the open dumping method. Sukosari TPA with 3.8 hectares accommodates up to 88.47 tons of waste/day. This implemented waste collection activity causes problems for the environment, such as water and air pollution. The purpose of the study was to evaluate the environmental quality at the Sukosari landfill and to design appropriate management directions based on the environmental risk index assessment.

The methods used in the research are survey and mapping methods, sampling methods, laboratory tests and analysis methods. The analysis method carried out is based on the Regulation of the Minister of Public Works of the Republic of Indonesia Number 03 of 2013 concerning the Implementation of Waste Infrastructure and Infrastructure in the Handling of Household Waste and Waste Similar to Household Waste. The parameters observed were the criteria for the final disposal site (20 parameters), the criteria for waste in the landfill (4 parameters) and the leachate characteristics (3 parameters).

The results showed that the Sukosari TPA had an Environmental Risk Index of 493.4987 which was included in the moderate hazard level so that the TPA could be continued and rehabilitated into a controlled landfill in stages. This is because there are several parameters with hazard sensitivity index values including distance to the nearest water source, soil permeability, distance to surface water, type of waste, distance to nearest settlement in the dominant wind direction, and humidity of waste. Therefore, the management directive action that can be taken is in the form of landfill mining in the passive zone of the Sukosari TPA. Meanwhile, leachate characteristics such as BOD and COD that exceed the quality standard of direction must be carried out by making IPL and a buffer zone in the form of sengon trees around the Sukosari TPA.

Keywords: TPA Sukosari, Environmental Risk Index, Hazard Level Evaluation.